

Philosophy 10: Introduction to Logic (Spring 2024)

Time: Mon Wed 4:00-4:50

Room: PETER 108

Instructor: Rick Grush

Email: rgrush@ucsd.edu

Rick's Office Hours Fri 1pm-3pm via Zoom: <https://ucsd.zoom.us/j/99089661207>

1. Discussion Sections and TAs

TA	Sections	Office Hours	Email
Ayoob Shahmoradi	A05 Wed 2:00-2:50 Solis 110 A06 Wed 3:00-3:50 Solis 110	Wed 12:00--2:00pm Office: RWAC 0429	ayoob@ucsd.edu
Zack Brants	A07 Wed 5:00 - 5:50 RWAC 0103 A08 Thur 5:00 - 5:50 Solis 110	Thur 12:00-2:00pm At Art of Espresso (Cafe by Mandeville)	zbrants@ucsd.edu
Daniel Cohen	A01 Mon 12:00 - 12:50 CSB 005 A02 Mon 1:00 - 1:50 CSB 005	Wed 2:00-4:00pm Office: RWAC 0430	djcohen@ucsd.edu

2. Short Description

Content: This course consists of six parts of roughly equal length. In the first four parts we will cover the basics of formal sentential logic, including translations into formal notation, truth tables, and proofs. In the

5th part we will study informal reasoning, focusing on ways that it can commonly go wrong. The sixth part will cover cognitive biases. Note that students in this class are expected to complete their own work on all quizzes and the final exam, and not copy from other students or any other source, nor allow other students to copy from them.

Structure: The material is divided into 6 chapters. We will focus on one chapter at a time, about 1 chapter every 1.5 weeks. After each of Chapters 1 through 5 there will be a quiz. After Chapter 6 there will be a cumulative final exam.

3. Text, lecture videos, and other materials

Textbook: The text for the course is *Basic Sentential Logic, Informal Fallacies, and Cognitive Biases* (BSIC), which is available at UCSD bookstore. This text is concise and covers everything you will need to know, and nothing that you won't need to know. The text also contains practice quizzes for all quizzes (and solutions) and a practice final exam, with solutions. So of all the materials for the course, it is probably the most important.

Lecture Videos: Also, all lectures -- including video, and pdfs of powerpoint slides -- are available for viewing/download. Links are also below in the schedule. The Youtube channel that has all the lecture videos is here:

<https://www.youtube.com/playlist?list=PLhv5ZC-vWmG4nh8-Jkk-iEal83KLS-toZ>

In-person Lectures: These cover the same material as the video version of the lectures.

Note that the text, lecture videos, and in-person lectures all cover the same material. You have options as to how you learn the content you need to learn for the class.

Exercises: There are a huge number of exercises, all with solutions, for each chapter. Rather than put all of these in the textbook (which would add a lot of pages, making it not only heavier but also more expensive) they are online. You can find links to the exercises and solutions for each chapter on the

appropriate row of the schedule below.

Discussion sections. These are a great way for you to ask questions, see someone work out problems, and generally make sure you know what is going on. Highly recommended.

Office hours. Also a great way to get clarification. Highly recommended.

4. Schedule

The following schedule is subject to change. The dates of quizzes may have to be changed for any of a number of reasons. If any quiz days change, these changes will be announced on canvas as soon as possible.

Preliminary Material	New and updated video about the mechanics of the class -- how grades and sections and quizzes and all that stuff will work: COURSE INTRO VIDEO TBA And this video introduces the course material: What is logic? What is logic? (15 min)
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Chapter 1	Videos
Chapter 1 Lectures: April 1 April 3	Ch. 1, Vid 1 (Time: 31:18) [Ch. 1 Vid 1 Slides] - Arguments, premises, conclusions; induction vs. deduction'; Validity, soundness, strength, cogency

<p>April 8</p> <p>Quiz 1: April 10</p>	<p>Ch. 1, Vid 2 (Time: 16:57) [Ch. 1 Vid 2 Slides]</p> <p>- Argument Form; atomic vs. compound statements; Statement operators; recursion</p>
<p>Exercises:</p> <p>Ch.1 Exercises (online HTML)</p> <p>Ch.1 Exercises (65 page PDF)</p>	<p>Ch. 1, Vid 3 (Time: 19:30) [Ch. 1 Vid Ch 1 Vid 1.pdf3 Slides]</p> <p>- Conjunction operator; negation operator; “main” operators</p> <p>Ch. 1, Vid 4 (Time: 16:12) [Ch. 1 Vid 4 Slides]</p> <p>- Disjunction operator; “neither ... nor ...”; Compound subjects and predicates</p> <p>Ch. 1, Vid 5 (Time: 18:46) [Ch. 1 Vid 5 Slides]</p> <p>- Conditional operator</p>
<p>Optional Material:</p> <p>Chapter 1: Optional Material</p>	<p>Ch. 1, Vid 6 (Time: 17:08) [Ch. 1 Vid 6 Slides]</p> <p>- Translating compound statements; pronouns, etc.</p> <p>Ch. 1, Vid 7 (Time: 18:51) [Ch. 1 Vid 7 Slides]</p> <p>- Translating arguments; verb tense, mood, etc. Negation vs. lexical contrast</p> <p>Practice Quiz One (Time: 39:56)</p>

<p>Chapter 2</p>	<p>Videos</p>
<p>Chapter 2 Lectures:</p> <p>April 15</p> <p>April 17</p> <p>Quiz 2: April 22</p>	<p>Ch. 2, Vid 1 (Time: 13:51) [Ch. 2 Vid 1 Slides]</p> <p>- Functions and Truth Functions</p> <p>Ch. 2, Vid 2 (Time: 25:49) [Ch. 2 Vid 2 Slides]</p> <p>- Four truth functions: conjunction, negation, Disjunction and conditional</p>

	<p>Ch. 2, Vid 3 (Time: 20:45) [Ch. 2 Vid 3 Slides]</p> <p>- Assessing argument validity with a truth table (Preliminary)</p>
<p>Exercises:</p> <p>Ch.2 Exercises (online HTML)</p> <p>Ch 2 Exercises (146 page PDF)</p>	<p>Ch. 2, Vid 4 (Time: 27:38) [Ch. 2 Vid 4 Slides]</p> <p>- Constructing a truth table for any statement Or set of statements</p> <p>Ch. 2, Vid 5 (Time: 11:52) [Ch. 2 Vid 5 Slides]</p> <p>- Contingencies, contradictions, tautologies</p> <p>Ch. 2, Vid 6 (Time: 22:50) [Ch. 2 Vid 6 Slides]</p> <p>- Consistency, equivalence, and implication</p> <p>Ch. 2, Vid 7 (Time: 14:36) [Ch. 2 Vid 7 Slides]</p> <p>- Assessing argument validity</p>
<p>Optional Material:</p> <p>Ch 2: Optional Material</p>	<p>Ch. 2, Vid 8 (Time: 23:47) [Ch. 2 Vid 8 Slides]</p> <p>- How to approach conceptual questions</p> <p>Ch. 2, Vid 9 (Time: 28:01) [Ch. 2 Vid 9 Slides]</p> <p>- How to answer the kinds of questions that will be on the quiz</p> <p>Practice Quiz 2 [NOTE: While working out question 6 I slip and say/write 'tautology' when clearly the answer is 'contingency'] (Time: 37:35)</p>

Chapter 3	Videos
<p>Chapter 3 Lectures:</p> <p>April 24</p> <p>April 29</p>	<p>Ch. 3, Vid 1 (Time: 23:53) [Ch. 3 Vid 1 Slides]</p> <p>- Intro to Proof method; Modus Ponens (MP); Simplification (simp)</p>

<p>Quiz 3: May 1</p>	<p>Ch. 3, Vid 2 (Time: 15:20) [Ch. 3 Vid 2 Slides] - Examples of proofs using MP and simp</p> <p>Ch. 3, Vid 3 (Time: 17:25) [Ch. 3 Vid 3 Slides] - Truth preservation</p>
<p>Exercises:</p> <p>Ch. 3 Exercises (online HTML)</p> <p>Ch. 3 Exercises (107 page PDF)</p>	<p>Ch. 3, Vid 4 (Time: 17:33) [Ch. 3 Vid 4 Slides] - Modus tollens (MT) and disjunctive syllogism (DS)</p> <p>Ch. 3, Vid 5 (Time: 23:29) [Ch. 3 Vid 5 Slides] - Example proofs using MP, simp, MT and DS</p> <p>Ch. 3, Vid 6 (Time: 13:44) [Ch. 3 Vid 6 Slides] - Conjunction (conj) and disjunction introduction (DI)</p>
<p>Optional Material:</p> <p>Chapter 3: Optional Material</p>	<p>Ch. 3, Vid 7 (Time: 23:37) [Ch. 3 Vid 7 Slides] - Example proofs using all inference rules</p> <p>Ch. 3, Vid 8 (Time: 30:56) [Ch. 3 Vid 8 Slides] - Conditional Proof</p> <p>Ch. 3, Vid 9 (Time: 25:51) [Ch. 3 Vid 9 Slides] - Clarifications about what you can and can't do in proofs; Examples using all inference rules and CP</p>

<p>Chapter 4</p>	<p>Videos</p>
<p>Chapter 4 Lectures: May 6 May 8</p>	<p>Ch. 4, Vid 1 (Time: 21:40) [Ch 4 Vid 1 Slides] - First three replacement rules: double negation (DN); Commutation (comm); conditional exchange (CE)</p>

Chapter 4	Videos
<p>Quiz 4: May 13</p>	<p>Ch. 4, Vid 2 (Time: 13:38) [Ch 4 Vid 2 Slides] - Examples of proofs using DN, comm and CE</p>
<p>Exercises:</p> <p>Ch. 4 Exercises</p>	<p>Ch. 4, Vid 3 (Time: 19:44) [Ch 4 Vid 3 Slides] - DeMorgan's (DM), contraposition (contra), And association (assoc)</p> <p>Ch. 4, Vid 4 (Time: 14:05) [Ch 4 Vid 4 Slides] - Examples of proofs using all replacement rules</p>
<p>Optional Material:</p> <p>Chapter 4: Optional Material</p>	<p>Ch. 4, Vid 5 (Time: 20:52) [Ch 4 Vid 5 Slides] - The difference between inference rules And replacement rules</p> <p>Ch. 4, Vid 6 (Time: 22:12) [Ch 4 Vid 6 Slides] - Indirect proof</p> <p>Ch. 4, Vid 7 (Time: 18:49) [Ch 4 Vid 7 Slides] - Examples using Indirect Proof, and Rules for using Indirect Proof</p> <p>Ch. 4, Vid 8 (Time: 23:55) [Ch 4 Vid 8 Slides] - Using the proof method to derive tautologies</p>

<p>Chapter 5</p>	<p>Videos</p>
<p>Chapter 5 Lectures: May 15 May 20 May 22</p> <p>Quiz 5: May 29</p>	<p>Ch. 5, Vid 1 (Time 12:57) [Ch 5 Vid 1 Slides] - Introduction to informal fallacies, and Argument analysis</p> <p>Ch. 5, Vid 2 (Time 20:58) [Ch 5 Vid 2 Slides] - Ad hominem circumstantial, argument analysis</p> <p>Ch. 5, Vid 3 (Time 25:33) [Ch 5 Vid 3 Slides] - Ad hominem abusive, ad hominem tu quoque, and Ad hominem association</p>
<p>Exercises: Ch. 5 Exercises</p>	<p>Ch. 5, Vid 4 (Time 15:53) [Ch 5 Vid 4 Slides] - Ad populum bandwagoning, and ad populum snobbery</p>
<p>Optional Material: Chapter 5: Optional Material</p>	<p>Ch. 5, Vid 5 (Time 14:53) [Ch 5 Vid 5 Slides] - Straw Man</p> <p>Ch. 5, Vid 6 (Time 11:15) [Ch 5 Vid 6 Slides] - Alternate Description</p> <p>Ch. 5, Vid 7 (Time 27:39) [Ch 5 Vid 7 Slides] - Slippery slope; and comparison between slippery slope, Straw man and alternate description</p> <p>Ch. 5, Vid 8 (Time 44:33) [Ch 5 Vid 8 Slides] - False cause</p> <p>Ch. 5, Vid 9 (Time 34:17) [Ch 5 Vid 9 Slides] - Argument analysis and answering questions on exams</p>

Chapter 6	Videos
<p>Chapter 6 Lectures:</p> <p>June 3 June 5</p>	<p>[Vid for 6.1-6.4] [Vid for 6.5-6.7] Slides for Ch 6 videos</p>
<p>Exercises:</p> <p>Ch. 6 Exercises (online HTML)</p> <p>Ch. 6 Exercises (57 page PDF)</p>	
<p>Optional Material:</p> <p>Chapter 6: Optional Material</p>	

<p>Final Exam: Thurs June 13, 3-6pm Room: TBA Early option: Time TBA (probably evening of June 7)</p>	<p>Some additional final exam practice questions</p>
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Location TBA	
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5. Quizzes, final exam, grades, sections etc.

Points

There are six chapters in the text. Chapters 1-5 will each have a quiz worth 100 points, *and* a section on the final exam worth 50. So each of Chapters 1-5 have a total of 150 points.

Chapter 6 will not have a separate quiz, but will have 150 points worth of questions on the final exam. So each chapter has a total of 150 points associated with it. And there are 6 chapters. So that is **900 points total for the class**. To summarize:

Chapter 1:	Quiz 1 (100 points)	+	Final Exam Section 1 (50 points)	=	150 points
Chapter 2:	Quiz 2 (100 points)	+	Final Exam Section 2 (50 points)	=	150 points
Chapter 3:	Quiz 3 (100 points)	+	Final Exam Section 3 (50 points)	=	150 points
Chapter 4:	Quiz 4 (100 points)	+	Final Exam Section 4 (50 points)	=	150 points
Chapter 5:	Quiz 5 (100 points)	+	Final Exam Section 5 (50 points)	=	150 points
Chapter 6:	(no quiz for Ch. 6)	+	Final Exam Section 6 (150 points)	=	150 points

Letter Grades and Curve

Letter grades will not be assigned until after all points are in.

The worst-case scenario will be a straight 10% breakdown, that is, 90%-100% will be As (A-, A), 80%-89.9% will be Bs (B-, B or B+), and so on. However, depending on the class average and grade distribution, the cut-offs **may** be curved slightly in your favor. For example, hypothetically, if the class average is low enough, scores as low as 87.5% may get an A-. But in no case will the cut-offs move higher than a straight 10% breakdown, so that is the worst-case scenario as far as you are concerned.

The table below shows the highest-possible and lowest-possible cut-offs for every letter grade. The actual letter grade

cut-offs will be between these. Whether or not there is a curve will not be known until all quizzes and the final are graded and recorded, since that is when I will know the average and distribution. Note that the highest grade achievable in the normal way is an A. (See below for how to get an A+.)

Letter Grade	Default Cut-off	But could curve as low as		Letter Grade	Default Cut-off	But could curve as low as
A	93%	91.5%		C+	77%	71%
A-	90%	87.5%		C	73%	66.5%
B+	87%	83.5%		C-	70%	62.5%
B	83%	79%		D	60%	50%
B-	80%	75%		F	0	0

Optional Material (Note, this is NOT 'extra credit'!!)

Each chapter has a couple of optional topics, and each quiz and the final will have some questions on this optional material. This material is similar to the material in each chapter, but goes into more depth. Most students should probably not worry about the optional material, and instead learn the regular material as well as they can and maximize their points that way. The optional material is intended for philosophy majors, math majors, computer science majors, anyone who will take courses in advanced logic, and anyone else who finds the regular material fairly straight-forward and wants to explore the topics in a little more depth. Here's the way it works:

1. The optional material for each chapter is not in the text. (The more pages in the text, the more it costs, and I want to keep it cheap and light.) You can find the links to the material for each chapter in the schedule above, near the bottom of the first column for each chapter.
2. I will not lecture on the optional material, and the TAs will discuss it *at most* only a small amount in discussion

sections, but probably not at all. Lectures and sections are devoted to the core material. But you are welcome at my office hours or the office hours of any of the TAs to discuss the optional material all you want.

3. Each quiz will include 1 question on the optional material from the corresponding chapter, and the final will have 5 questions on the optional material covering all chapters. For a total of 10 questions on optional material.
4. Each of the optional questions will be worth 10 **puntos**. Not *points*, because we will keep separate track of *points* earned on the core material, and any **puntos** earned on the optional material. Puntos don't get added to points. We keep separate track of points and puntos, because they do different things in the grading process. See #5 and #6 below for this.
5. Any student who gets 85 puntos or more on the optional material will have their letter grade bumped up $\frac{2}{3}$ of a letter grade. So for example, a B+ would be bumped to an A.
6. Any student who gets between 70 and 84.9 puntos will have their letter grade bumped up $\frac{1}{3}$ of a letter grade. So for example, an A would be bumped to an A+.

So the grade bumping is only going to take effect for a student who gets at least 70% on all the optional questions. Which means that unless you are planning to make an effort on the optional material throughout the class, don't worry about the optional material at all or the questions. Getting a few puntos here and there on a couple of the quizzes won't help you at all.

I can't stress this enough: 80% of the students in the class should not worry about the optional questions on any of the tests, and should not worry about the part of the grading policy connected to puntos and optional material. Most students are best served by focusing on the regular material, and making sure they get as high a percentage as they can on the regular material. You can get an A in the class without touching any of the optional questions. In fact, most of the As and A-s are from students who didn't even look at the optional material.

And if your grasp of the regular material isn't very good -- meaning if you aren't already getting 85% - 90% + on the quizzes anyway, then any time you spend on the optional material is going to hurt you. You should be focusing on the regular material.

That said, I invite all students to *read* the optional material. Some of it may not make sense, some of it will, but hopefully at least some of it will be interesting. But unless you're crushing the regular material, don't worry about the optional questions on the tests. Focus instead on getting the grade you want by making sure you know the regular core material very well.

Grade Change Information

Every quarter a certain number of students who apparently need to pass the class in order to graduate or remain eligible for some sort of aid, or whatever, miss the C- cut-off, or the D cut-off, or whatever it is that they need. Some of these students are then unable to graduate, or maintain eligibility for something, etc. If this is your situation then ***you need to make sure you pass the class, or get whatever grade it is you want or need to get.***

We will help you to learn the material. We have office hours and are happy to help if you are having trouble with the material; practice quizzes are available for you to assess your own level of preparation. The TAs and I are happy to spend time with anyone to help them get a handle on the material so they can do well on the quizzes and final. But it is *your responsibility* to attend/watch lectures, attend sections, study the material, do problem sets, and take practice quizzes and final, and come to office hours if you need help. And if you need help, the sooner you get help the better. If you are tanking and you wait until week 8 or 9 or 10 to get help, it could be too late.

So while we will do whatever we can to help you get the grade you want or need by helping you to learn the material, we will NOT help you get the grade you want or need by just bumping your grade at the end of the class because you are in a tough spot and need a favor. We will NOT adjust grades after they have been assigned, except in cases where an actual error of some sort has been made (for example, if we added the points incorrectly on a quiz). See the section below on how to do well in this course for more advice on how to put yourself in the best position possible to get the grade you want or need. It is no fun being unable to graduate because you missed a C- by 1 point out of 900, and I don't like having to be the one who fills out the D or F on the grade sheet. *I really don't.* It's one of the worst parts of this job. So do us both a favor and be certain that you learn the material well enough to pass the class -- or get whatever grade it is you need to get.

I apologize for the negative tone of this section, but I take it that the vast majority of the students in this class who work hard and study the material do so on the assumption that the grade they earn on that basis means something. They are depending on me and the TAs to not do things like give some other student the same grade just because this other student did some lobbying at the end of the term. Every student's grade is determined by the points they receive, including those who miss a grade cut-off by 1 point (or less) out of 900. I am spending so much time on this topic because, as I said, I don't like being the one who fills out the F or D on the grade sheet for a student who was planning to graduate, has a job lined up, or is on the borderline of eligibility, etc. So ***please***, study, attend lectures (*and* watch the videos), do the practice quizzes and practice final, ***attend and participate in sections*** -- and ask questions if there is anything you don't understand. See me or the TAs when you need help. We're actually very nice people, and we want you to succeed. Don't take a risk by not studying, skipping lectures or skimping on the exercises, and try to estimate how

much you can slack off and 'probably' still pass. To sum up: the time to come see me (or a TA) is *before* you get the bad grade, enough before so we can help you to not get the bad grade. Seeing us after is too late.

That said, and as mentioned above, if there are actual issues -- such as a genuine issue or mistake on our part with the way a problem was graded, or a mistake in how scores were recorded -- we are happy to help. I'm not saying we will not ever change a grade or score. Just that we won't change it based on someone wanting a higher score.

Missed quiz policy

Quizzes are given on the days and times specified on the syllabus (or announced in advance in case of a change to the schedule) only. **No make-up quizzes, either after the scheduled time or before the scheduled time, are given.** Rather, if you miss a quiz you will have the opportunity to replace most or all of the missed points by having the points you earn on the corresponding section of the final count for more. Here is how it works.

The final exam is cumulative, and has sections that correspond to material from each quiz -- each of these sections 1-5 is worth 50 points. If a student misses a quiz for a legitimate reason, then the points that the student earns on the section of the final that corresponds to the missed quiz will be multiplied by 2, and that number will be used for the student's missed quiz score (because $50 \times 2 = 100$). So for example, if you miss quiz 3 for a legitimate reason, then that is potentially up to 100 points you missed. So suppose you get 45/50 points on Section 3 of the final, then we will multiply that by 2 to get 90/100. And so we will fill in your quiz 3 score with a 90. Legitimate reasons include illness with a doctor's note. You need to contact us and let us know about the legit reason, and provide any documentation, asap. Personal travel plans that conflict with the schedule, forgetting about the quiz, oversleeping, etc. are not legitimate excuses.

If you miss a quiz for a non-legitimate reason, such as a vacation or oversleeping, you can still take advantage of this policy, but with a 15% penalty, meaning that rather than multiplying the score on the relevant part of the final by 2, we will multiply it by 1.7. So if you missed quiz 3 for a non-legitimate reason and got 45/50 points on Section 3 of the final, we'd multiply that by 1.7 to get 76.5/100, and use that number as your quiz 3 score.

Missing a quiz because you added the class late counts as non-legitimate, and so is subject to the 15% penalty. It's not a perfect solution, but when you do the math it's not bad. (If you're on the waitlist, you should still do the work so that when you get into the class, you aren't already behind.)

IF YOU FEEL ILL before a quiz (or for some other reason suspect you might do very poorly), please carefully consider whether you wish to take the quiz or not. Once you turn in the quiz, then whatever is written on your quiz paper counts as your quiz. It is too late at that point to decide you want to skip the quiz because you feel like crap but take the 15% penalty. Sometimes missing it with a 15% penalty is better if you can't focus or are pretty sure you are going to really bomb because you feel really bad for whatever reason.

Section Participation

Attendance for discussion sections is not required, *but it is highly recommended*. And in fact you can attend any section you want, not necessarily the one you are officially enrolled in.

Also, if you participate ('participate' means *at least* show up and pay attention, though the TA may have different requirements), you can get some extra credit.

What you need to do to get the extra credit

You need to do three things to get extra credit for section participation.

1. **Go to section, and participate.** What 'participate' means depends on the TA, but mainly you should pay attention, and try to get value from being there.
2. **Sign in on the sign in sheet that the TA will pass around.** When you get the sheet, sign your name on the first (lowest number) line that is blank.
3. **Sign in on the online form, links below.** You need to enter your email, 9 digit student PID, your name, and the number of the line you signed on for the paper sign in sheet the TA passed around. Make sure all of these are correct. You have until 11:59PM on the day you attended section to fill in the online form. Make sure all the information is correct. If you put the wrong PID number the spreadsheet won't be able to credit you with the points

Here are the links for the online forms

[A01 Mon 12:00-12:50 CSB 005](#)

[A02 Mon 1:00-1:50 CSB 005](#)

[A05 Wed 2:00-2:50 Solis 110](#)

[A06 Wed 3:00-3:50 Solis 110](#)

[A07 Wed 5:00-5:50 RWAC 0103](#)

[A08 Thur 5:00-5:50 Solis 110](#)

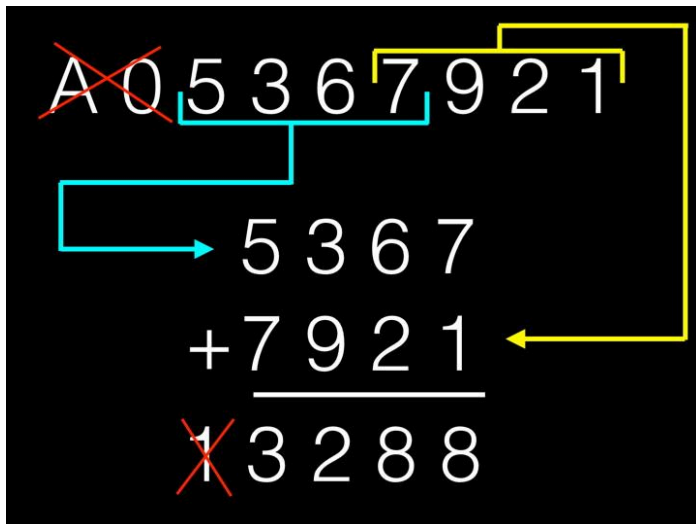
How much extra credit can you get?

You get 4 points per section you attend, with a max of 4 points per week. Also, there is an overall limit of 32 extra credit points for section attendance.

6. Score Sheets

Score sheets will be posted to this sheet [[SCORESHEET](#)]. These will be updated after each quiz. Scores are listed by a coded version of your student ID number in order to protect privacy, as per University regulations. In order to determine what your coded ID number is, do the following. Take your student ID number (PID). This will be something like a letter followed by 8 digits, like "A05367921". Remove the letter and the first digit, and you're left with a string of 7 digits, like "5367921". Take the first four digits, and treat this as a 4 digit number (something between 0000 and 9999); and take the

last four digits and treat this like another 4-digit number. In the example above, they would be "5367" and "7921". Add these two numbers together, for example: $5367 + 7921 = 13288$. If the number you get is 5 digits, remove the first digit to make it 4 digits long; if it is 4, then keep it at 4 digits. This is your coded ID number. To see another example: If your student ID is "A01234567", you drop the first letter and number: "1234567"; then take the first 4 digits: "1234"; and the last 4 digits "4567"; add them together: $1234+4567=5801$. (Why don't we just take the first 4 numbers and the last 4? Because almost all PIDs have 1 or 0 as their first digit, which makes the digits of the real PID determinable from the coded



version.)

Note that it occasionally happens that two different students end up with the same coded ID number. Any duplicates are indicated by bold red numbers. Most of the time you should be able to figure out which is yours, based on section attendance dates and quiz scores. **But if you have ANY DOUBT at all, email me and I'll verify which is yours.**

If you cannot find your row on the score sheet, first make sure you figured your coded ID correctly. 80% of the time students can't find their score it is because they figured their coded ID incorrectly. If you still have trouble, email me with **your name, section, your student ID number, and what you figured your coded ID number to be.**

7. How to do well in this course

- A. Read the text before lecture. Yes, the lecture and text are very similar. But going through the same ideas more than once is good. Also, even though the concepts and explanations are the same, the examples I use in lecture are mostly different from the examples I use in the text.
- B. Attend discussion sections. Bring questions with you if you have any. Ask questions in the sections. The sections are a great place to make sure you're on the right track, and get practice in.
- C. Do plenty of exercises. Each chapter has a load of online exercises and solutions. **Start with the easy ones. Make sure you have them down before you move up to harder ones.** A lot of students waste a lot of their time (especially in chapters 3 and 4) by starting with proofs that are too difficult, and they get frustrated. Start easy and slow, and work your way up.
- D. Have a plan and stay on track. Read the text, attend lectures and discussion sections, and don't wait until the day before a quiz or the final to start preparing by doing exercises. This class is very manageable if you just set a pace and stay on it.
- E. As soon as you realize you are having any difficulties, get it addressed. Ask about it in section, or come to office hours. The earlier you get help the better.
- F. There will be some multiple choice questions concerning this syllabus on a few of the quizzes, and maybe the final. In total, about 15 or 20 points will be available through such questions. So read this syllabus!! The questions won't be super hard. My goal is to make questions that will be easy to answer for anyone who has read the syllabus. **So there's another 10 or 15 easy points!!!**
- G. For each quiz and the final, a practice version is available in the text. I recommend that before the actual quiz/final,

you administer it to yourself. Then grade your quiz (answers are also in the text). This will allow you to find what material, if any, you need to work on some more. Consult myself or your TA, or simply do more exercises of the type you need to improve on until you feel you have mastered this material.

Some students end up getting grades worse than they expect because they do not follow the above advice. The material looks easy when you read through it or watch someone else work a proof or truth table, and many students then think "That looks easy, I'll be able to do that on a quiz." But as some students learn the hard way, watching someone do it is a lot easier than doing it yourself. Practice, practice, practice. [Amazingly, I give people this advice every time I teach this class, and every time a large chunk of students still fall into exactly these traps.]

8. Information for OSD students

If you are a student approved by OSD for accommodations, you need to coordinate with me beforehand. For EACH quiz for which you need accommodations (or the final), you should email me at least 3 days prior to the quiz/exam to set up and verify the time and place. If I do not hear from you *at least* 3 days prior to the quiz, then I cannot guarantee that I will be able to provide accommodations. Also note that you should get your official OSD paperwork done asap, preferably before the class begins. I am prohibited from providing OSD accommodations unless the correct paperwork is up to date. Please email me or pop into office hours to discuss your situation if you are unsure about anything or if there is anything on this topic you want to talk about.